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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,527	11/24/2003	Taro Fukaya	245820US0TTCRD	1993

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EXAMINER	
SERGENT, RABON A	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/718,527	FUKAYA ET AL.	
	Examiner	Art Unit	
	Rabon Sergent	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/03,9/04,10/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 2, 5, 7, 8, 10, and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have failed to disclose the claimed ratio of claim 2, and have further failed to elaborate or provide explanation with respect to the presence of isocyanate groups with the urethane resin. The claim can only be interpreted as referring to functional or reactive isocyanate groups; however, this interpretation is not consistent with the language of the specification.

2. Claims 2, 5, 7, 8, 10, and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Firstly, applicants have failed to provide enablement for the presence of unreacted isocyanate groups within the urethane. As aforementioned, this concept has not been disclosed; therefore, one of ordinary skill could not practice the invention without having to resort to undue experimentation. Secondly, with respect to claim 8, applicants have failed to provide enablement for hydroxyl and isocyanate functional compounds. Given the reactivity of isocyanate with hydroxyl groups, one of ordinary skill would not expect that methods or products that employ them would be viable. Applicants have provided no clear examples of these compounds, and one of ordinary skill could not practice this aspect of the invention without having to resort to undue experimentation.

3. Claims 4 and 9-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claims 4, 14, 17, and 20, it is unclear "what" is being specified by the language, "at least one of" (at least one of what?).

Within claims 9-11, "claims" should not be plural.

Within claims 12, 15, and 18, it is unclear, in view of the claim language, if the claims require the presence of both the carboxyl derived decomposing agent and the isocyanate or epoxy-containing decomposing agent. In other words, it is unclear if the "any one of" language pertains solely to the carboxyl derived agent or to both the aforementioned agents.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-4, 6, 7, 10, and 12-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/445,361. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set claims is drawn to compositions and methods wherein a urethane resin has been decomposed or recycled by treating the resin with a carboxyl group derived compound.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-4, 6, 7, 10, and 12-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/870,905. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set claims is drawn to compositions and methods wherein a urethane resin has been decomposed or recycled by treating the resin with a carboxyl group derived compound.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-4, 6, 7, 10, and 12-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/873,237. Although the conflicting claims are not identical, they

are not patentably distinct from each other because each set claims is drawn to compositions and methods wherein a urethane resin has been decomposed or recycled by treating the resin with a carboxyl group derived compound.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-4, 6, 7, 10, and 19-20 are directed to an invention not patentably distinct from claims 1-18 or 1-22 of commonly assigned 10/870,905 or 10/873,237, respectively. See paragraphs 6 and 7.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned 10/870,905 and 10/873,237, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 5-222152 (applicants' own admission).

Applicants have stated within the Information Disclosure Statement of November 24, 2003 that the reference uses the same isocyanate decomposing agent but in a different mixing ratio. The mixing ratio does not distinguish the instant claims, because the claims are not limited to any mixing ratio.

11. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/34672.

The reference discloses the treatment of polyurethane with a carboxylic acid anhydride. See page 21, lines 6+.

12. Claims 5, 11, 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Falke et al. ('344) or Lidy et al. ('078).

The reference discloses the production of polyols, wherein a polyurethane is decomposed in the presence of an epoxy compound. See column 4, lines 37+ within Falke et al. See abstract of Lidy et al.

13. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Aguirre ('931).

The reference discloses the treatment of polyurethane with a carboxylic acid salt. See column 2, lines 20+ and column 3, line 46.

14. Claims 1, 2, 6, 7, 9, 10, 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Schneider et al. ('749).

The reference discloses the decomposition of polyurethane by treatment with polyester adducts. See abstract and column 6, lines 50+.

15. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Wiggins et al. ('991).

The reference discloses the treatment of polyurethane with diisocyanates or epoxy compounds. See abstract.

16. Claims 1, 2, 6, 7, 9, 10, 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Broeck et al. ('151).

The reference discloses the decomposition of polyurethane by treatment with polyester polyols. See examples.

17. Claims 1, 2, 6, 7, 9, 10, 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Heiss ('577).

The reference discloses the decomposition of polyurethane by treatment with polyester polyols and/or metal carboxylate salts. See column 3, line 41 through column 4, line 12.

18. Claims 1, 2, 9, 10, 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Heiss ('824).

The reference discloses the decomposition of polyurethane by treatment with carboxylic acids. See column 1, lines 54+ and column 2.

19. Claims 1-4, 9, 10, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang et al. ('167).

The reference discloses the decomposition of polyurethane by treatment with carboxylic acid anhydrides. See abstract and column 3, lines 5+.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

RABON SERGENT
PRIMARY EXAMINER

R. Sergent
June 23, 2005